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10/505,342	06/24/2005	Takayuki Matsushima	17155/003001	5910

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EXAMINER

GOFF II, JOHN L

ART UNIT	PAPER NUMBER
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1791

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ELECTRONIC

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Continuation of 11. does NOT place the application in condition for allowance because:

Applicants argue, "Additionally, because the adhesive layer on the first object (conductive sheet 5) and the adhesive layer on the second object (resin sheet 6) consist of a thermosetting adhesive, they are cured with only their own components when heated. In paragraphs [0012] and [0013], it is described that the adhesive layer on the first object (conductive sheet 5) and the adhesive layer on the second object (resin sheet 6) are deposited on ITO electrode 3 and a surface of LSI 1 for driving liquid crystal each at 100-150 degrees (temporal surface tacking status), showing that the thermosetting adhesive is cured with only its own components."

JP '947 teaches first and second adhesive layers (5 and 6) which layers are cured after tightly contacting the layers and thrusting. JP '947 does not further describe each adhesive layer. JP '947 does not teach that each adhesive layer is cured with only its own components, i.e. there is no teaching away from using a two-pack adhesive. As to applicants arguments that the adhesive of JP '947 is not intended to be cured at a low temperature in a short time, it is noted the claims do not require any particular curing temperature and/or time.

Applicants further argue, "Applicant notes that the teachings of JP '769 are limited to application of a principal ingredient of a two-pack adhesive to one object and the hardener/curing agent thereof to the second object."

JP '769 is applied as evidence of the well taken use of two-pack adhesives to bond first and second objects of an electrical device wherein one pack is applied to the first object and the other pack is applied to the second object. JP '769 does not describe or require any particular two-pack adhesive. As to applicants arguments that the adhesive of JP '769 does not teach a silane coupling agent and aluminum chelate that react to generate a cation and polymerize the thermosetting resin, it is noted JP '769 was not applied to teach this particular limitation.

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Applicants further argue, "In JP '643, it is mentioned that two-pack adhesives include a solution of first components (an aluminum compound added to an alicyclic epoxy resin) and a solution of second components (a silicone resin added to a similar epoxy resin). When the first solution and second solution are mixed, the aluminum compound and the silicone resin react and are cured promptly at low temperatures (ambient temperatures). However, there is no description that the first and second solutions are applied and preserved on separate substrate to each have superior shelf life and stability."

JP '643 teaches a specific two-pack adhesive which adhesive has a long shelf life when the two packs/solutions are separate and is quickly curable at normal or high temperatures when the two packs/solutions are mixed. JP '769 evidences the application of two-pack adhesives wherein one pack/solution is applied to a first object and the other pack/solution is applied to the second object thereby preserving the long shelf life and not reacting the components of the adhesive until the objects are contacted.

Applicants further argue, "Further, the Examiner attempts to conclude that the combination of these references teaches that one should apply to a first object the epoxy resin, the first or second curing agent, and the electrically conductive particles, and applying to a second object the other of the first or second curing agent. However, this conclusion is not supported by the references. Rather, no reference has suggested separation of the first and second curing agent. The only separation suggested is between the resin and the curing agent."

This conclusion is supported by JP '643 teaching the two-pack adhesive is a first pack/solution including the silane coupling agent and the second pack/solution includes the aluminum chelate, and JP '769 evidencing that in application of a two-pack adhesive to adhere two objects one of the packs is applied to one of the objects and the other of the packs is applied to the other of the objects.

Regarding applicants arguments to JP '235, JP '474, and Arai, JP '235 and JP '474 are only applied to evidence the epoxy has a softening point less than 150 °C or 100 °C as shown by Arai wherein JP '235 and JP '474 also expressly evidence that the adhesive in JP '769 is cured

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via cationic polymerization from cations developed by reaction of the silane coupling agent and aluminum chelate.

/John L. Goff/

Primary Examiner, Art Unit 1791